

**SHAWNEE NATIONAL FOREST**  
**BIOLOGICAL EVALUATION FOR**  
**PLANT SPECIES WITH VIABILITY EVALUATIONS (SVE) AND**  
**OTHER STATE OF ILLINOIS THREATENED AND ENDANGERED**  
**PLANT SPECIES**

**HIDDEN SPRINGS/MISSISSIPPI BLUFFS RANGER DISTRICTS**

**Ozark Road Improvement Project**  
**Pope County**

**May 14, 2012**

**INTRODUCTION AND PROPOSED MANAGEMENT ACTION**

The Hidden Springs Ranger District supports known occurrences and suitable habitat for Plant Species with Viability Evaluations (SVE) and State of Illinois Threatened and Endangered plant species, all of which were considered in this analysis. This BE documents the analysis of potential impacts of the proposed action to SVE and state listed plant species. This document discloses the potential direct, indirect, and cumulative impacts resulting from the Ozark Road Improvement Project and a No Action alternative.

Pope County Road District Number 2 received funding to upgrade the Ozark Road (from Appel Road to the Water Tower Road) from a gravel surface to chip-seal. A portion of this road (from Appel Road to the Burden Falls road, about 1.7 miles) is under Forest Service jurisdiction. Pope County has requested a road maintenance agreement to allow them to accomplish this road improvement work. The improvement would accommodate the public traffic, increase safety and would reduce future maintenance costs. The work would include replacement of eight culvert pipes, clearing, brushing and adding gravel, with disturbance limited to the existing road corridor. The road would be upgraded to an oil and chip surface.

**ALTERNATIVES**

Two alternatives are presented, the Proposed Action and No Action.

**Proposed Action Alternative**

Under the road maintenance agreement the Forest would allow Pope County to maintain and improve Ozark Road (#402) from the intersection of the Delwood Road and Bell Smith Springs to the intersection of Appel Road in McCormick, about 1.7 miles. The work would include replacement of eight culvert pipes, clearing, brushing and adding gravel, with disturbance limited to the existing road corridor. The road would be upgraded to an oil and chip surface. Removal of brush and trees up to four inches DBH would occur during routine maintenance. The terms of the maintenance agreement are included below.

THE COOPERATOR (Pope County Road District Number 2) SHALL:

1. Replace culvert pipes and perform motor grader work in preparation for applying an oil and chip surface. Culvert Installation shall be in accordance with US Department of Transportation FP-03 (Standard Specifications For Construction of Roads and Bridges on Federal Highway Projects, USDOT, 1999).
2. Perform all work within the existing and established road surface as defined in Exhibit B. Maximum traveled way width shall be 20 feet, maximum shoulder shall be 1 foot on either side of traveled way. Total maximum road surface width shall be 22 feet.
3. Surface blade the traveled way, clean established lead-off ditches, clean the existing ditchlines and smooth the road surface where rock ledges are present and can be removed by either backhoe or track hoe.
4. Not perform any clearing work to remove trees or brush. Nor perform any clearing work when replacing culvert pipes.
5. Mark the location of culverts to be replaced and contact the Forest Service a minimum of 72 hours prior to any culvert replacement.
6. Place a two-layer oil and chip surfacing to the existing roadway once road prep is complete.
7. Notify the Forest Service a minimum of 72 hours prior to placement of the oil and chip surfacing.
8. Follow the MUTCD (FHWA 2009) for safety and traffic signing in the work zone, including utilizing flag people when needed.
9. Assume all maintenance responsibility for this segment of roadway upon completion of work. Maintenance requirements are as follows:
  - a. Road Surface width for maintenance shall be as listed in item 2 above.
  - b. Brushing limits shall be a maximum of 10 feet from edge of road surface and does not include removal of standing trees larger than 4 inches in diameter. Overhead clearing shall be a minimum of 14 feet above the road surface. (See Exhibit C)
10. Mowing limits shall be a maximum of 10 feet from the edge of the road surface. (See Exhibit D)
11. Mowing and brushing shall occur as often as necessary to ensure the safety of the traveling public.

THE U.S. FOREST SERVICE SHALL:

1. Retain all jurisdiction responsibility for this segment of roadway.
2. Shall be on site when culverts are installed.

### **No Action Alternative**

This alternative would not implement any aspect of the proposal. The Forest would continue to maintain the road as a gravel road. This is a viable alternative, but it would not meet the purpose and need for this project.

### **SVE AND STATE LISTED PLANT SPECIES KNOWN TO OCCUR IN POPE COUNTY**

The following information was compiled from computer databases and available literature. The below plant species are known from Pope County where the Ozark Road Improvement Project on the Shawnee National Forest is located.

**Species with Viability Evaluations (SVE) and Other State of Illinois Threatened and Endangered plant species known to occur or have been documented as historically occurring within Pope County of southern Illinois. Note: IL-T = Illinois Threatened, IL-E = Illinois Endangered, IL-Ex = Presumed Extirpated in Illinois, A = Alexander, G = Gallatin, H = Hardin, Ja = Jackson, Jo = Johnson, M = Massac, P = Pope, S = Saline, U = Union, and W = Williamson.**

#### SVE

G,H,Ja,Jo,P,S	<i>Cirsium carolinianum</i> (Soft Thistle) (SVE)
H,Jo,P,S	<i>Matelea obliqua</i> (Climbing Milkvine) (SVE, IL-T)
G,Ja,Jo,P,S,U,	<i>Polytaenia nuttallii</i> (Nuttall's Prairie Parsley) (SVE)

#### STATE LISTED

P	<i>Berchemia scandens</i> (Supple-jack) (IL-E)
G,Ja,(Jo),P,S,(U)	<i>Botrychium biternatum</i> (Southern Grape Fern) (IL-T)
(A),Jo,(M),P,S	<i>Carex intumescens</i> (Greater Bladder Sedge) (IL-T)
M	<i>Carex reniformis</i> (Sedge) (IL-E)
(Ja),Jo,(P),(U)	<i>Carex striatula</i> (Lined Sedge) (IL-E)
H,P	<i>Chimaphila maculata</i> (Striped Prince's Pine) (IL-E)
M,P	<i>Cyperus lancastricensis</i> (Manyflower Flat Sedge) (IL-E)
A,M,P,S,W	<i>Eryngium prostratum</i> (Creeping Eryngo) (IL-E)
(A),Ja,M,P)	<i>Hypericum lobocarpum</i> (= <i>H. densiflorum</i> ) (Five-lobed St. John's Wort)
Jo,P	<i>Lysimachia radicans</i> (Trailing Yellow Loosestrife) (IL-E)
(H),Ja,P	<i>Malus angustifolia</i> (Southern Crabapple) (IL-E)
A,G,H,(Ja),P,(U)	<i>Melothria pendula</i> (Guadaloupe Cucumber) (IL-T)
P,U	<i>Penstemon brevisepalus</i> (Short-sepaled Beard Tongue) (IL-E)
A,U,P,S,Jo,Ja	<i>Penstemon tubiflorus</i> (White Wand Beardtongue) (IL-E)
Jo,P,U	<i>Phemeranthus parviflorus</i> (= <i>Talinum</i> ) (Sunbright) (IL-T)
(A),(Ja),Jo,M,P	<i>Planera aquatica</i> (Planertree) (IL-T)
Jo,M,P	<i>Salvia azurea</i> ssp. <i>pitcheri</i> (Blue Sage) (IL-T)
(P),U	<i>Sisyrinchium atlanticum</i> (Eastern Blue-eyed Grass) (IL-T)
H,M,(P)	<i>Tilia americana</i> var. <i>heterophylla</i> (American Basswood) (IL-E)

( ) a parenthesis on the county indicates that the species has been extirpated or thought to be extirpated from that particular county.

#### IMPACTS

The Project road has been traveled for numerous years by several botanists and ecologists with no records of any SVE or State of Illinois threatened or endangered plants being documented. The roadway edge, including approximately 25 feet on either side of the gravel, was floristically

surveyed on May 10, 2012. A species list was compiled and can be found at the end of the Regional Forester's Sensitive Plant BE.

No SVE or State of Illinois listed plants were found at the time of the survey and only marginal habitat for a few species was noted (*Berchmia scandens* (Supple-jack), *Chimaphila maculata* (Striped Prince's Pine), *Malus angustifolia* (Southern Crabapple), and *Melothria pendula* (Guadaloupe Cucumber). With no SVE or State-listed plant species present, there will be no direct or indirect impacts with either the proposed action or the no-action alternative.

## **CUMMULATIVE IMPACTS**

Since there will be no impacts to any known locations of SVE or State-listed plant species, there are no cumulative impacts to analyze for. The project can proceed as proposed with no negative impacts to SVE or State-listed plant Species. If any new populations are discovered prior to or during project implementation, the proper standards and guidelines will be followed to protect the new populations/individual(s).

/s/Elizabeth Longo Shimp  
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